

Notes from November 1, 2004 TeV BPM Upgrade Meeting
Stephen Wolbers

Echotek -- Updates

Last week there was progress on understanding failures of Echotek boards, classifying them, and coming to some agreement with Echotek about how to proceed. Some boards with "hard" failures will be returned for replacement. Another class of failures is still being investigated.

Modes of Operation/Commissioning -- Jim Steimel

Jim Steimel is writing a document that describes in some detail the operation of the TeV BPM system. This document will of course be placed in the AD doc DB as it is completed. This meeting (and the next) will concentrate on specific issues that Jim has pulled out for detailed discussion.

Jim first described the Graychip setup. There are two modes -- closed orbit and turn by turn (TBT). Jim has files that can implement both of these modes and they have been tested either in A3 or in A1. Though this may not be the final configuration for all time it is a starting point for commissioning the system.

	Split	Decimation	Output 3dB	Points/	Processing	Time
	I-Q		Rate	Point Trig.		
Closed Orbit	Yes	4096	18kHz	700Hz	24	1.3ms
Turn-by-turn	Yes	16	4.65MHz	360kHz	20	4.3ms

The next discussion started with an updated buffer diagram. This was quite a long discussion about the requirements for first turn measurements (primarily) and how the system can be configured to make these measurements given all the variants of circumstances that would lead to these measurements being desired. There was discussion of TCLK events, states and state devices, state transitions, failures, etc. In the end the detailed proposal and implementation will be written up, discussed further, and then put into effect.

After one hour plus with much more to discuss we adjourned and will continue on Thursdays and Mondays.